

WHAT IS CLAIMED IS:

1. A system having a motherboard, the motherboard comprising
a first set of connections facilitating a first port to support a symmetric PCI
Express-type data transfer when in a first mode of operation;
a second set of connections facilitating a second port to support an asymmetric
PCI Express-type data transfer when in a second mode of operation,
wherein the second set of connections is a subset of the first set of
connections.
2. The system of claim 1 wherein the first set of connections includes a plurality
of bidirectional lane pairs and the second set of connectors includes at least one
unidirectional lane-pair to support a unidirectional data transfer when in the second mode
of operation.
3. The system of claim 1 further comprising:
a mode detect module to determine a mode of operation as one of the first mode
of operation and the second mode of operation.
4. The system of claim 1 further comprising the system being a host interface
controller.
5. The system of claim 4, wherein the host interface controller is associated with
a north-bridge controller.
6. The system of claim 1 further comprising the system being an image
controller.
7. The system of claim 6 wherein the image controller is a graphics controller.
8. The system of claim 6 wherein the image controller is a video controller.

9. The method of claim 1, wherein during the second mode of operation a number of data transmit connections is greater than a number of data receive connections.

10. The method of claim 1, wherein during the second mode of operation a number of data receive connections is greater than a number of data transmit connections.

11. The method of claim 1, wherein during the second mode of operation a number of data receive connections is greater than a number of data receive connections.

12. The method of claim 4, wherein during the second mode of operation a number of data receive connections is greater than a number of data transmit connections.

13. A method comprising the steps of:

when in a first mode of operation:

transmitting data to a first peripheral system over a first plurality of PCI Express-type port connectors; and
receiving data from the first peripheral system over a second plurality of PCI Express-type port connectors, wherein the second plurality is less than the first plurality.

14. The method of claim 13 further comprising:

when in the first mode of operation:

transmitting data to a second peripheral system over a third plurality of PCI Express-type port connections; and
receiving data from the second peripheral device over a fourth plurality of PCI Express-type port connections, wherein the fourth plurality is equal in quantity to the third plurality.

15. The method of claim 14 further comprising:

when in a second mode of operation

transmitting data to a third peripheral system over the first plurality of PCI Express-type port connections; and

receiving data from the third peripheral device over the second, third and fourth plurality of PCI Express-type port connections.

16. The method of claim 13 further comprising:
determining a mode of operation to be one of a first mode of operation and a second mode of operation; and
configuring a system to operate in the mode of operation.

17. A system comprising a PCI Express-type port comprising a plurality of single bit transmitter/receiver pairs having one or more control inputs to configure the transmitter/receiver pair as a transmitter when the one or more control inputs receives a first select value, and as a receiver when the select input receives a second select value.

18. The system of claim 17 wherein one of the one or more control inputs is to hold the transmitter in a high impedance state.

19. The system of claim 17 wherein the plurality comprises a number of four or greater.

20. A system comprising a PCI Express port comprising a first plurality of data receive connectors to receive a first data when in a first mode of operation, and a second plurality of data transmit connectors dedicated to transmit a second data when in the first mode of operation, wherein the first plurality is greater than the second plurality.

21. The system of claim 20, wherein the system is an image system.

22. The system of claim 21, wherein the image system is a graphics system.

23. The system of claim 21 , wherein the image system comprises an add-on card.

24. The system of claim 21, wherein the image system comprises an integrated circuit device.
25. The system of claim 21, wherein the image system is a video system.
26. The system of claim 21, wherein the image system comprises an add-on card.
27. The system of claim 21, wherein the image system comprises an integrated circuit device.
28. The system of claim 21, wherein the image system comprises an add-on card.
29. The system of claim 21, wherein the image system comprises an integrated circuit device.
30. A method comprising the steps of:
when in a first mode of operation:
 receiving data to a first peripheral system over a first plurality of PCI Express-type port connectors; and
 transmitting data from the first peripheral system over a second plurality of PCI Express-type port connectors, wherein the second plurality is less than the first plurality.
31. An system comprising:
a first PCI Express lane buffer comprising a first transmitter and a first receiver;
a second lane buffer comprising a second transmitter and a third transmitter, ,
 wherein the second and third transmitters are operational equivalent to the first transmitter.

32. An system comprising:
a first PCI Express lane buffer comprising a first transmitter and a first receiver;
a second lane buffer comprising a second receiver and a third receiver, wherein
the second and third receivers are operational equivalent to the first
receiver.